

List of Publications Bat-Sheva Eylon

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A. Articles in Refereed Journals

1. Pospiech, G., Eylon, B., Bagno, E., Lehavi, Y., and Geyer, M. A. (2015). "The role of mathematics for physics teaching and understanding". In: *Nuovo Cimento C Geophysics Space Physics C*, Volume 38, Issue 3.
2. Linn, M. C., Eylon B., Rafferty, A., and Vitale, J. M. (2015). Designing instruction to improve lifelong inquiry learning. *Eurasia Journal of Mathematics Science and Technology Education*, 11 (2), 217-225. doi: 10.12973/eurasia.2015.1317a
3. Matuk, C., Linn, M. C., and Eylon, B. (2015). Technology to support teachers using evidence from student work to customize technology-enhanced inquiry units. *Instructional Science*, 43(2), 229-257. doi: 10.1007/s11251-014-9338-1
4. Fallik, O., Rosenfeld, S., and Eylon, B. (2013). School and out-of-school science: A model for bridging the gap. *Studies in Science Education*, 49, 69-91.
5. Yerushalmi, E., and Eylon, B. (2013). Supporting teachers who introduce curricular innovations into their classrooms: A problem-solving perspective. *Physical Review Special Topics - Physics Education Research*, 9, 010121-1—010121-23.
6. Scherz, Z., Bialer, L., and Eylon, B. (2011). Towards accomplished practice in Learning Skills for Science (LSS): The synergy between design and evaluation methodology in a reflective CPD programme. *Research in Science and Technological Education*, 29, 49-69.
7. Kapon, S., Ganiel, U., and Eylon, B. (2011). Utilizing public scientific web lectures to teach contemporary physics at the high school level: A case study of learning. *Physical Review Special Topics - Physics Education Research*, 7, 020108, doi:10.1103/PhysRevSTPER.7.020108
8. Mualem, R., and Eylon, B. (2010). Junior high school physics: Using a qualitative strategy for successful problem solving. *Journal of Research in Science Teaching*, 47, 1094-1115. doi: 10.1002/tea.20369
9. Kapon, S., Ganiel, U., and Eylon, B. (2010). Explaining the unexplainable: Translated Scientific Explanations (TSE) in public physics lectures. *International Journal of Science Education*, 32, 245-264.

10. Kapon, S., Ganiel, U., and Eylon, B. (2009). Goals and design of public physics lectures: Perspectives of high school students, physics teachers and lecturers. *Physics Education*, 44, 528-535.
11. Kapon, S., Ganiel, U., and Eylon, B. (2009). Scientific argumentation in public physics lectures: Bringing contemporary physics into high school teaching. *Physics Education*, 44, 33-38.
12. Mualem, R., and Eylon, B. (2009). Teaching physics in junior high school: Crossing the borders of fear. *European Journal of Teacher Education*, 32, 135-150.
13. Spektor-Levy, O., Scherz, Z., and Eylon, B. (2009). Teaching scientific communication skills in science studies: Does it make a difference? *International Journal of Science and Mathematics Education*, 7, 875-903.
14. Kapon, S., Ganiel, U., and Eylon, B. (2009). Scientific argumentation in public physics lectures: Bringing contemporary physics into high school teaching. *Physics Education*, 44, 33-38.
15. Scherz, Z., Spektor-Levy, O., and Eylon, B. (2008). Teaching communication skills in science: Tracing teacher change. *Teaching and Teacher Education*, 24, 462-477.
16. Harrison, C., Hofstein, A., Eylon, B., and Simon, S. (2008). Evidence-based professional development of teachers in two countries. *International Journal of Research in Science Education*, 30, 577-591.
17. Scherz, Z., Bialer, L., Eylon, B. (2008). Learning about teachers' accomplishment in 'Learning Skills for Science' practice: The use of portfolios in an evidence-based continuous professional development programme. *International Journal of Science Education*, 30, 643-667. doi:10.1080/09500690701854865
18. Eylon, B., Berger, H., and Bagno, E. (2008). An evidence-based continuous professional development program on knowledge integration in physics: A study of teachers' collective discourse. *International Journal of Science Education*, 30, 619-641.
19. Berger, H., Eylon, B., and Bagno, E. (2008). Professional development of physics teachers in an evidence-based blended learning program. *Journal of Science Education and Technology*, 17, 399-409.
20. Bagno, E., Eylon, B., and Berger, H. (2008). Meeting the challenge of students' understanding formulas in high-school physics: A learning tool. *Physics Education*, 43, 75-82.
21. Margel H., Eylon, B., and Scherz, Z. (2008). A longitudinal study of junior high school students' conceptions of the structure of materials. *Journal of Research in Science Teaching*, 45, 132-152. doi: 10.1002/tea.20214
22. Fallik, O., Eylon, B., and Rosenfeld, S. (2008). Motivating teachers to enact free-choice project-based learning in science and technology (PBLSAT): Effects of a professional development model. *Journal of Science Teacher Education*, 19, 565-591. doi: 10.1007/s10972-008-9113-8

23. Mualem, R., and Eylon, B. (2007). "Physics with a smile": Explaining phenomena with a qualitative problem solving strategy. *The Physics Teacher*, 45, 158-163.
24. Bagno, E., Eylon, B., and Levy, S. (2007). Photography as means of narrowing the gap between physics and students. *Physics Education*, 42, 45-49.
25. Eylon, B., and Bagno, E. (2006). Research-design model for professional development of teachers: Designing lessons with physics education research. *Physical Review Special Topics -- Physics Education Research*, 2, 020106-1—020106-14. doi:10.1103/PhysRevSTPER.2.020106
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27. Margel, H., Eylon, B., and Scherz, Z. (2006). From textiles to molecules: How to consolidate macro-micro knowledge about materials. *Journal of Chemical Education*, 83, 1552-1556.
28. Langley, D., and Eylon, B. (2006). Probing high school physics students' views and concerns about learning activities. *International Journal of Science and Mathematics Education*, 4, 215-239.
29. Margel, H., Eylon, B., and Scherz, Z. (2004). "We actually saw atoms with our own eyes": Conceptions and convictions in using the scanning tunneling microscope in junior-high school. *Journal of Chemical Education*, 81, 558-566.
30. Kali, Y., Orion, N., and Eylon, B. (2003). Effect of knowledge integration activities on students' perception of the earth's crust as a cyclic system. *Journal of Research in Science Teaching*, 40, 545-565. doi: 10.1002/tea.10096
31. Eylon, B. (2000). Designing powerful learning environments and practical theories: The knowledge integration environment. *International Journal of Science Education*, 22, 885-890.
32. Bagno, E., Eylon, B., and Ganiel, U. (2000). From fragmented knowledge to a knowledge structure: Linking the domains of mechanics and electromagnetism. *American Journal of Physics*, 68, S16-S26.
33. Linn, M. C., and Eylon, B. (2000). Knowledge integration and displaced volume. *Journal of Science Education and Technology*, 9, 287-310.
34. Langley, D., Ronen, M., and Eylon, B. (1997). Light propagation and visual patterns: Pre-instruction learners' conceptions. *Journal of Research in Science Teaching*, 34, 399-424. doi:10.1002/(SICI)1098-2736(199704)34:4<399::AID-TEA8>3.0.CO;2-M
35. Bagno, E., and Eylon, B. (1997). From problem-solving to a knowledge structure: An example from the domain of electromagnetism. *American Journal of Physics*, 65, 726-736.

36. Eylon, B., Ronen, M., and Ganiel, U. (1996). Computer simulations as tools for teaching and learning: Using a simulation environment in optics. *Journal of Science Education and Technology*, 5, 93-110.
37. Ronen, M., Eylon, B., Rivlin, O., and Ganiel U. (1993). Designing and using an open graphic interface for instruction in geometrical optics. *Computers in Education*, 20, 299-309.
38. Ronen, M., and Eylon, B. (1993). To see or not to see: The eye in geometrical optics – when and how? *Physics Education*, 28, 52-59.
39. Razel, M., and Eylon, B. (1990). Development of visual cognition: Transfer effects of the Agam program. *Journal of Applied Developmental Psychology*, 11, 459-485.
40. Eylon, B., and Ganiel, U. (1990). Macro-micro relationships: The missing link between electrostatics and electrodynamics in students' reasoning. *International Journal of Science Education*, 12, 79-94.
41. Eylon, B., and Linn, M. (1988). Learning and instruction: An examination of four research perspectives in science education. *Review of Educational Research*, 58, 205-302.
42. Ben-Zvi, R., Eylon, B., and Silberstein, J. (1988). Theories, principles and laws. *Education in Chemistry*, 25(3), 89-92.
43. Eylon, B., Ben-Zvi, R., and Silberstein, J. (1987). Hierarchical task analysis: An approach for diagnosing students' conceptual difficulties. *International Journal of Science Education*, 9, 187-196.
44. Ben-Zvi, R., Eylon, B., and Silberstein, J. (1987). Students' visualization of a chemical reaction. *Education in Chemistry*, 24, 117-120.
45. Razel, M., and Eylon, B. (1986). Developing visual language skills: The Agam program. *Journal of Visual Verbal Languaging*, 6(1), 49-54.
46. Markovits, Z., Eylon, B., and Bruckheimer, M. (1986). Functions today and yesterday. *For the Learning of Mathematics*, 6(2), 18-24.
47. Ben-Zvi, R., Eylon, B., and Silberstein, J. (1986). Revision of course materials on the basis of research on conceptual difficulties. *Studies in Educational Evaluation*, 12, 213-223.
48. Ben-Zvi, R., Eylon, B., and Silberstein, J. (1986). Is an atom of copper malleable? *Journal of Chemical Education*, 63, 64-66.
49. Eylon, B., Hofstein, A., Maoz, N., and Rishpon, M. (1985). Extra-curricular science courses: Filling a gap in school science education. *Research in Science and Technological Education*, 3, 81-89. doi:10.1080/0263514850030109
50. Eylon, B., and Reif, F. (1984). Effects of knowledge organization on task performance. *Cognition and Instruction*, 1, 5-44.

51. Cohen, R., Eylon, B., and Ganiel, U. (1983). Potential difference and current in simple electric circuits: A study of students' concepts. *American Journal of Physics*, 5, 407-412.
52. Wollman, W., Eylon, B., and Lawson, A. E. (1980). An analysis of premature closure in science and developmental stages. *Journal of Research in Science Teaching*, 17, 105-114. doi:10.1002/tea.3660170204.
53. Wollman, W., Eylon, B., and Lawson, A. E. (1979). Acceptance of lack of closure, is it an index of advanced reasoning? *Child Development*, 50, 656-667.
54. Cheifetz, E., Eylon, B., Fraenkel, Z., and Gavron, A. (1972). Emission of He in the spontaneous fission of Cf252. *Physics Review Letters*, 29, 805-808.

B. Books

1. Pospiech, G., Michelini, M., and Eylon, B. S. (Eds.) (2019). *Mathematics in Physics Education*. Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-030-04627-9>.
2. Linn, M. C., and Eylon, B. S. (2015). *Science learning and teaching science: using technology to promote knowledge integration* [Chinese translation of *Science learning and instruction: Taking advantage of technology to promote knowledge integration*, published in 2011 by Routledge]. Shanghai, China: East China Normal University Press.
3. Linn, M. C., and Eylon, B. S. (2011). *Science learning and instruction: Taking advantage of technology to promote knowledge integration*. New York, NY: Routledge.
4. Hofstein, A., Eylon, B., and Giddings, G. (Eds.). (1995). *Science education: From theory to practice*. Rehovot, Israel: Weizmann Institute of Science, Department of Science Teaching.

C. Chapters in Books (Peer-reviewed)

1. Levy, S., Bagno, E., Berger, H., and Eylon, B. S. (2020). Motivators, contributors, and inhibitors to physics teacher-leaders' professional development in a program of professional learning communities: The case of a collaborative reading assignment. In Kolikant, Y. B. D., Martinovic, D. and Milner-Bolotin, M. (Eds.), *STEM Teachers and Teaching in the Digital Era - Professional expectations and advancement in 21st Century Schools*. (pp. 159-184). Dordrecht, the Netherlands: Springer. <https://doi.org/10.1007/978-3-030-29396-3>.
2. Eylon, B-S., Scherz, Z., and Bagno, E. (2020). Professional learning communities of science teachers: Theoretical and practical perspectives. In Kolikant, Y. B. D., Martinovic, D. and Milner-Bolotin, M. (Eds.), *STEM Teachers and Teaching in the Digital Era - Professional expectations and advancement in 21st Century Schools*. (pp.

- 159-184). Dordrecht, the Netherlands: Springer. <https://doi.org/10.1007/978-3-030-29396-3>.
3. Pospiech, G., Eylon, B., Bagno, B., and Lehavi, Y., (2019). Role of teachers as facilitators of the interplay physics and mathematics. In Pospiech, G., Michelini, M., and Eylon, B.S. (Eds.). *Mathematics in Physics Education*. (p 269) Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-030-04627-9>.
 4. Lehavi, Y., Mualem, R., Bagno, E., Eylon, B., and Pospiech, G. (2019). Taking the phys-math interplay from research into practice. In Pospiech, G., Michelini, M., and Eylon, B.S. (Eds.). *Mathematics in Physics Education*. (p 335) Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-030-04627-9>.
 5. Bagno, E., Berger, H., Magen, E., Polingher, C., Lehavi, Y., and Eylon, B. (2019). Starting with physics: A problem-solving activity for high school students connecting physics and mathematics. In Pospiech, G., Michelini, M., and Eylon, B.S. (Eds.). *Mathematics in Physics Education*. (p 317) Springer Nature Switzerland AG. <https://doi.org/10.1007/978-3-030-04627-9>.
 6. Hershkowitz, R., Markovits, Z., Rosenfeld, S., and Eylon B.S. (2018). Educating the Eye: The Agam Program for Visual Thinking. In: Movshovitz-Hadar, N. (Ed). *K-12 Mathematics draft Education in Israel - Issues and Challenges* (pp. 97-106). Series on Mathematics Education: Volume 13, World Scientific Publication, Singapore. ISBN: 978-981-3231-18-4.
 7. Levy, S., Bagno, E., Berger, H., and Eylon, B. (2018). Physics teacher-leaders' learning in a national program of regional professional learning communities. In Traxler, A., Cao, Y. and Wolf S. (Eds.), *Physics Education Research Conference Proceedings*, Washington, DC. doi:10.1119/perc.2018.pr.Levy.
 8. Kali, Y., Eylon, B.S., and McKenney, S., and Kidron, A. (2018). Design-centric research-practice partnerships: Building productive bridges between theory and practice. In J. M. Spector, B. Lockee, and M. Childress (Eds.), *Learning, Design, and Technology: An International Compendium of Theory, Research, Practice and Policy*. Cham: Springer. https://doi.org/10.1007/978-3-319-17727-4_122-1.
 9. Lehavi, Y., and Eylon, B.S. (2018), Integrating Science Education Research and History and Philosophy of Science in Developing an Energy Curriculum. In: M. R. Matthews (Ed.), *New Contributions to HPS-informed Science Education Research* (Anthology).
 10. Lehavi, Y., Bagno, E., Eylon, B-S., Mualem, R., Pospiech, G., Böhm, U., Krey O., and Karam, R. (2016). Classroom evidence of teachers' PCK of the interplay of Physics and Mathematics. In: Tomasz Greczyło and Ewa Dębowska (Eds.), *Key Competences in Physics Teaching and Learning: Selected Contributions from the International Conference GIREP EPEC 2015*, Wrocław, Poland, 6-10 July 2015.
 11. Eylon, B., and Hofstein, A. (2015). Curriculum development and change in the sciences. In R. Gunstone (Ed.), *Encyclopedia of Science Education* (pp 258-264). Heidelberg, Germany: Springer.

12. Yerushalmi, E., and Eylon, B. (2015). Problem solving in science learning. In R. Gunstone (Ed.), *Encyclopedia of Science Education* (pp 786-790). Heidelberg, Germany: Springer.
13. Eylon, B., Eldar, O., Berger, H., Bagno, E., and Ronen, M. (2013). Knowledge integration: A constructivist perspective for learning and instruction, examples from physics. In Z. Libman (Ed.), *Learning, understanding, knowing: Exploring pathways to constructivist teaching* (pp 194-233). Bene Berak, Israël: Hakibbutz Hameuchad -Sifriat Poalim Publishing Group. (in Hebrew).
14. Eylon, B. (2013). Foreword. In M. Ben-Peretz, S. Kleeman, R. Reichenberg, and S. Shimoni (Eds.), *Embracing the social and the creative: New scenarios for teacher education* (pp. V-VIII). Lanham, MD: Rowman and Littlefield Education.
15. Eldar, O., Eylon, B., and Ronen, M. (2012). A metacognitive strategy for preservice teachers: Collaborative diagnosis of conceptual understanding in science. In A. Zohar and Y. J. Dori (Eds.), *Metacognition in science education: Trends in current research* (pp. 225-250). Dordrecht, the Netherlands: Springer.
16. Langley, D., and Eylon, B. (2007). Structuring the integration of inquiry activities into high school science learning: Challenges and tools. In A. Zohar (Ed.), *Inquiry teaching: An ongoing challenge* (pp. 187-230). Jerusalem, Israel: Magnes. (in Hebrew).
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18. Eylon, B., and Hofstein, A. (2005). A long term and systemic approach to science curriculum development, implementation and evaluation. In J. Bennett, J. Holman, R. Millar, and D. Waddington (Eds.), *Making a difference: Evaluation as a tool for improving science education* (pp. 187-201). Munster, Germany: Waxmann.
19. Linn, M. C., Davis, E. A., and Eylon, B. (2004). Closing thoughts: Internet environments for science education. In M. C. Linn, E. A. Davis, and P. Bell (Eds.), *Internet environments for science education* (pp. 341-352). Mahwah, NJ: Erlbaum.
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22. Yerushalmi, E., and Eylon, B. (2001). Teachers' approaches to promoting self-monitoring in physics problem solving by their students. In R. Pinto and S. Surinach (Eds.), *Physics teacher education beyond 2000: Selected contributions* (pp. 129-132). Paris, France: Elsevier.
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- (Eds.), *Physics teacher education beyond 2000: Selected contributions* (pp. 119-123). Paris, France: Elsevier.
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 25. Eylon, B., and Bagno, E. (1997). Professional development of physics teachers through long-term in service programs: The Israeli experience. In E. W. Redish and J. S. Ridgen (Eds.), *The changing role of physics departments in modern universities: Proceedings of ICUPE* (pp. 299-326). New York, NY: American Institute of Physics.
 26. Linn, M. C., Songer, N. B., and Eylon, B. (1996, printed on demand in 2004). Shifts and convergences in science learning and instruction. In D. C. Berliner and R. C. Calfee (Eds.), *Handbook of educational psychology* (pp. 438-490). Mahwah, NJ: Erlbaum.
 27. Bagno, E., and Eylon, B. (1995). An integrative approach to the treatment of learning difficulties in electricity and magnetism. In A. Hofstein, B. Eylon, and G. Giddings (Eds.), *Science education: From theory to practice* (pp. 165-175). Rehovot, Israel: Weizmann Institute of Science.
 28. Eylon, B., Hofstein, A., and Giddings, J. (1995). Introduction to "Science Education: From Theory to Practice". In A. Hofstein, B. Eylon, and G. Giddings (Eds.), *Science education: From theory to practice* (pp. xi-xvi). Rehovot, Israel: Weizmann Institute of Science.
 29. Linn, M. C., and Eylon, B. (1994). Learning and instruction of science. In T. Husen and T. N. Postlethwaite (Eds.), *The International Encyclopedia of Education* (2nd ed., vol. 9, pp. 5338-5342). Oxford, UK: Pergamon Press.
 30. Eylon, B. (1994). Physical sciences: Secondary school programs. In T. Husen and T. N. Postlethwaite (Eds.), *The International Encyclopedia of Education* (2nd ed., vol. 8, pp. 4474-4479). Oxford, UK: Pergamon Press.
 31. Markovits, Z., Eylon, B., and Bruckheimer, M. (1988). Difficulties students have with the function concept. In A. F. Coxford and A. P. Shulte (Eds.), *The ideas of algebra, K-12: 1988 yearbook* (pp. 43-60). Reston, VA: The National Council of Teachers of Mathematics.
 32. Ben-Zvi, R., and Eylon, B. (1985). Fostering curriculum development in physical science and mathematics. In J. D. Bradley, M. Brand, and P. Lairdon (Eds.), *Curriculum development in physical science and mathematics* (pp. 111-113). Johannesburg, South Africa: University of Witswaterstrand.
 33. Eylon, B., Singer, I., and Ganiel, U. (1985). Problem-solving in high school: A necessary addition to the physics curriculum. In P. L. Lijnse (Ed.), *The many faces of teaching and learning mechanics* (pp. 312-318). Utrecht, The Netherlands: WCC.

34. Eylon, B., and Helfman, J. (1984). Analogical problem-solving processes in physics. In A. M. Mayer and P. Tamir (Eds.), *Science teaching in Israel: Origins, development and achievements* (pp. 259-271). Jerusalem, Israel: Science Teaching Center. (in Hebrew).
35. Ben-Zvi, R., Eylon, B., and Silberstein, J. (1984). Thinking patterns in chemistry: 10th graders' views of structure and process. In A. M. Mayer and P. Tamir (Eds.), *Science teaching in Israel: Origins, development and achievements* (pp. 303-314). Jerusalem, Israel: Science Teaching Center. (in Hebrew).

D. Chapters in Refereed Proceedings

1. Bar-Yosef, A., and Eylon, B. (2021). Sharing mechanisms between teachers in PeTeL. *Proceedings of the 14th Chais Conference of Research on Innovation and Learning Technologies*.
2. Bar-Yosef A., and Eylon, B. (2019). Designing a collaborative platform in order to respond to different use profiles of educators. *Israeli Symposium on Learning Analytics*.
3. Levy S., Bagno E., Berger H. and Eylon B. (2019). Teacher-leaders' learning while leading a professional learning community of physics teachers: the case of the inquiry-based lab, *ESERA Conference e-Proceedings*, Bologna, Italy.
4. Levy, S., Bagno, E., Berger, H., and Eylon, B. S. (2018). Physics teacher-leaders' learning in a National Program of Regional Professional Learning Communities. In A. Traxler, Y. Cao, and S. Wolf (Eds.), *Physics Education Research Conference Proceedings*, Washington, DC. <https://10.1119/perc.2018.pr.Levy>.
5. Segal. R., Lehavi. Y, Merzel. A., Baram, A., and Eylon. B.S. (2018). Using self-video-based conversation in training mathematics teacher instructors. Accepted to Research Report. In Bergqvist, E., Österholm, M., Granberg, C., and Sumpter, L. (Eds.). *Proceedings of the 42nd Conference of the International Group for the Psychology of Mathematics Education* (Vol. 4 pp. 139-146). Umeå, Sweden: PME.
6. Merzel, A., Lehavi, Y., Segal, R., Baram A., and Eylon, B.S. (2018). Elevating physics teachers' instruction using video-based didactics - A model of growth in professional awareness. Talk presented at the Conference of International Research Group on Physics Teaching (GIREP), San-Sebastian, Spain.
7. Lehavi, Y., Merzel, A., Segal, R., Baram, A., Eylon, B.S. (published in *Selected Papers for Proceedings GIREP 2017*). Using self-video-based conversations in training physics teachers. Presented at the GIREP 2017 Conference.
8. Khazina, S., Ramsky Y., and Eylon B. S. (2016). Computer modeling as a scientific means of training prospective physics teachers. *Proceedings of EDULEARN 16: 8th International Conference* (pp. 7699-7709).
9. Shapiro, T., Eylon, B., and Scherz, Z. (2016). A self-regulated digital environment for learning skills in science, WERA Annual Meeting, Washington DC.

10. Shapiro, T., Eylon, B., and Scherz, Z. (2015). A technology-enhanced intervention for self-regulated learning in science, NARST Meeting, Chicago, IL.
11. Pospiech, G., Eylon, B.S., Bagno, E., Lehavi, Y., and Geyer, M. A. (2015). The role of mathematics for physics teaching and understanding. In *The GIREP MPTL 2014 Conference Proceedings*.
12. Hans, M., Bagno, E., Berger, H., Eylon, B.S., Levy, S., Magen, E., Shvarzbord, J., Veisman, I., and Walter, M. (2015). An online community of physics teachers as a professional development framework. *Proceedings INTED-2015*.
13. Shapiro, T. Eylon, B., and Scherz, Z. (2015). A technology-enhanced learning environment for fostering self-regulated learning (Te-SRL). *Proceedings of Canada International Conference on Education 2015 (CICE-2015)*.
14. Langley, D., Eylon, B., and Arieli, R. (2015). Getting started in physics projects: Students' initial views. *Proceedings of GIREP 2014*.
15. Lehavi, Y., Bagno, E., Eylon, B. S., Mualem, R., Pospiech, G., Böhm, U., Krey O., and Karam, R. (2015). Towards a PCK of physics and mathematics interplay. In *Proceedings of the GIREP-MPTL 2014 International Conference, Teaching/Learning Physics: Integrating Research into Practice* (pp 843-852). Università degli Studi di Palermo.
16. Lehavi, Y., Bagno E., Eylon B., Mualem, R., Pospiech G., Böhm,U., Krey, O. and Karam, R. (2015). Towards a PCK of Physics and Mathematics interplay. *Proceedings of GIREP 2014*.
17. Lehavi, Y., and Eylon, B.S. (2014). Teachers' concept image of energy. In L. Dvořák and V. Koudelková (Eds.) *Proceedings of the International Conference on Physics Education: Active learning – in a changing world of new technologies*, 2013 Prague, Czech Republic.
18. Lehavi, Y., Eylon, B.S., Hazan, A., Bamberger Y., and Weizman, A. (2014). Focusing on changes in teaching about energy. In Taşar, M. F. and Üniversitesi G. (Eds.) *Proceedings of the World Conference on Physics Education 2012* Istanbul, Turkey.
19. Shapiro, T., Eylon, B., and Scherz, Z. (2013). Explicit instruction of learning skills for science embedded in physics learning materials. In Gómez Chova,L., López Martínez, A., Candel Torres, I. (Eds.), *Edulearn13 5th International Conference on Education and New Learning Technologies* (pp. 2253-2258). International Association of Technology, Education and Development (IATED).
20. Shapiro, T., Eylon, B., and Scherz, Z. (2013). A self-regulated digital environment for learning skills in science. In Gómez Chova, L., López Martínez, A., Candel Torres, I. (Eds.), *Edulearn13 5th International Conference on Education and New Learning Technologies* (pp. 2252-2253). International Association of Technology, Education and Development (IATED).
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